

FIG. 1

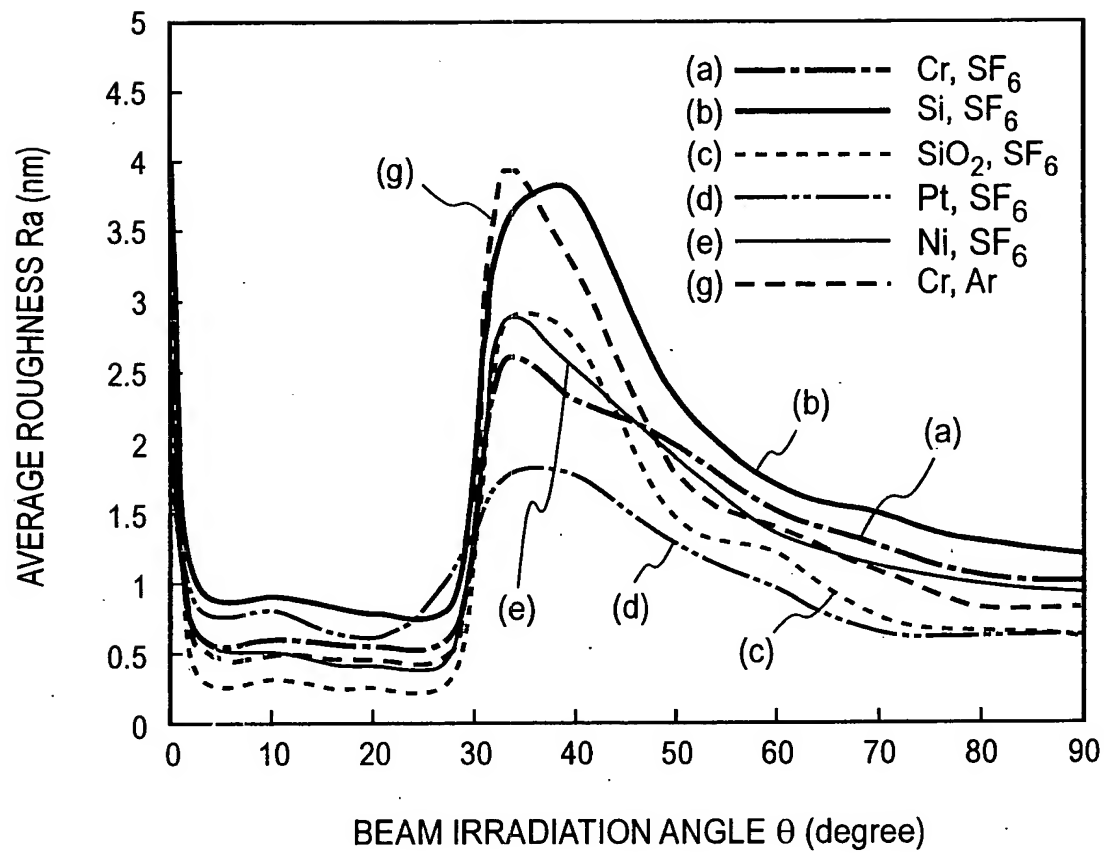


FIG. 2

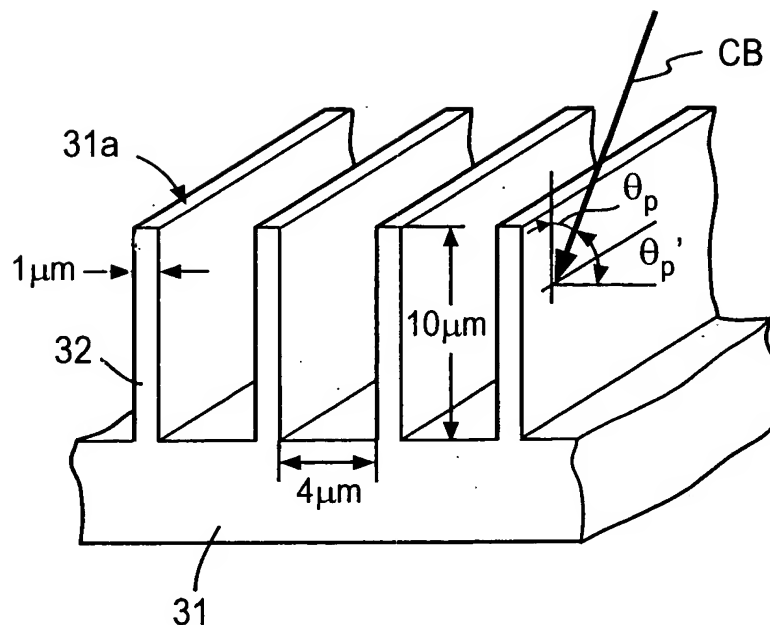


FIG. 3

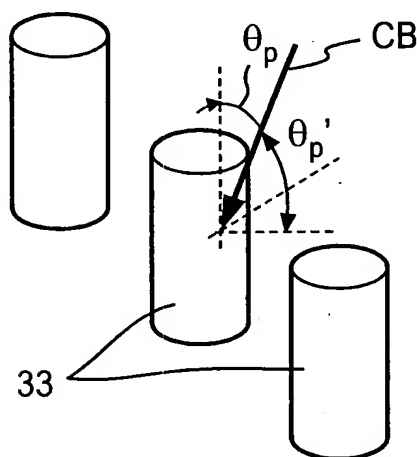


FIG. 4A

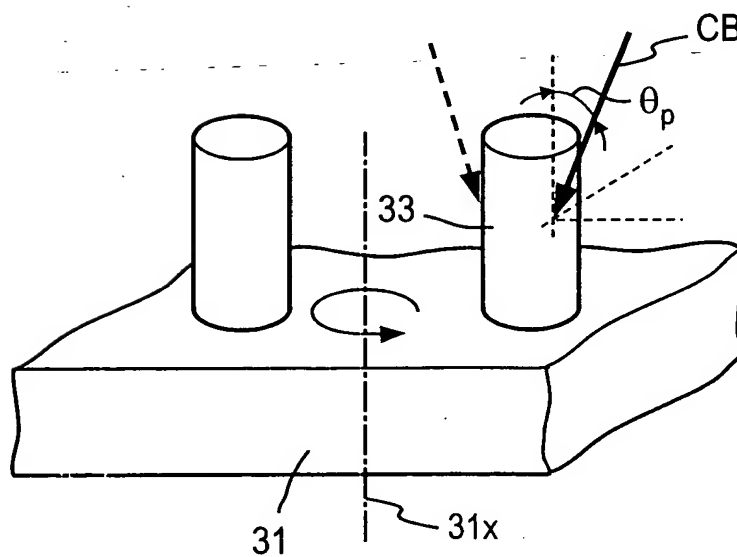


FIG. 4B

FIG. 5
TABLE 1: EMBODIMENT 8 (SAMPLE: Si; GAS: SF₆)

SMP#	FIRST STEP $\theta_p(\text{deg})$ $\theta_{r1}(\text{deg})$	SECOND STEP $\theta_p(\text{deg})$ $\theta_{r2}(\text{deg})$	Ra (nm)	SMP#	FIRST STEP $\theta_p(\text{deg})$ $\theta_{r1}(\text{deg})$	SECOND STEP $\theta_p(\text{deg})$ $\theta_{r2}(\text{deg})$	Ra (nm)
8-1	5 0	5 3	0.33	8-28	25 0	25 3	0.37
8-2	5 0	5 5	0.12	8-29	25 0	25 5	0.13
8-3	5 0	5 10	0.12	8-30	25 0	25 10	0.13
8-4	5 0	5 15	0.11	8-31	25 0	25 15	0.14
8-5	5 0	5 20	0.09	8-32	25 0	25 20	0.14
8-6	5 0	5 30	0.1	8-33	25 0	25 30	0.13
8-7	5 0	5 45	0.13	8-34	25 0	25 45	0.13
8-8	5 0	5 70	0.11	8-35	25 0	25 70	0.14
8-9	5 0	5 90	0.1	8-36	25 0	25 90	0.13
8-10	10 0	10 3	0.35	8-37	30 0	30 3	0.63
8-11	10 0	10 5	0.12	8-38	30 0	30 5	0.68
8-12	10 0	10 10	0.13	8-39	30 0	30 10	0.75
8-13	10 0	10 15	0.13	8-40	30 0	30 15	0.55
8-14	10 0	10 20	0.11	8-41	30 0	30 20	0.51
8-15	10 0	10 30	0.11	8-42	30 0	30 30	0.67
8-16	10 0	10 45	0.12	8-43	30 0	30 45	0.64
8-17	10 0	10 70	0.13	8-44	30 0	30 70	0.59
8-18	10 0	10 90	0.12	8-45	30 0	30 90	0.56
8-19	20 0	20 3	0.36	8-46	35 0	35 3	2.89
8-20	20 0	20 5	0.12	8-47	35 0	35 5	2.77
8-21	20 0	20 10	0.12	8-48	35 0	35 10	2.56
8-22	20 0	20 15	0.12	8-49	35 0	35 15	2.34
8-23	20 0	20 20	0.11	8-50	35 0	35 20	2.26
8-24	20 0	20 30	0.12	8-51	35 0	35 30	2.78
8-25	20 0	20 45	0.13	8-52	35 0	35 45	2.67
8-26	20 0	20 70	0.13	8-53	35 0	35 70	2.55
8-27	20 0	20 90	0.14	8-54	35 0	35 90	2.78

FIG. 6 TABLE 2: EMBODIMENT 9 (SAMPLE: Si; GAS: Ar)

SMP#	FIRST STEP		SECOND STEP		Ra (nm)
	θ_p (deg)	θ_{r1} (deg)	θ_p (deg)	θ_{r2} (deg)	
9-1	10	0	10	3	0.58
9-2	10	0	10	5	0.27
9-3	10	0	10	10	0.27
9-4	10	0	10	15	0.27
9-5	10	0	10	20	0.26
9-6	10	0	10	30	0.24
9-7	10	0	10	45	0.21
9-8	10	0	10	70	0.22
9-9	10	0	10	90	0.2

FIG. 7 TABLE 3: EMBODIMENT 12 (SAMPLE: Si; GAS: SF₆)

SMP#	FIRST STEP		SECOND STEP		Ra (nm)
	θ_p (deg)	θ_{r1} (deg)	θ_p (deg)	θ_{r2} (deg)	
12-1	10	0	20	10	0.28
12-2	20	0	10	10	0.26
12-3	10	0	20	20	0.27
12-4	20	0	10	20	0.25
12-5	10	0	20	3	0.48
12-6	10	0	20	5	0.29

FIG. 8 TABLE 4: COMPARATIVE EXAMPLE 5 (GAS: SF₆)

SMP#	FIRST STEP		SECOND STEP		SAMPLE	Ra (nm)
	θ_p (deg)	θ_{r1} (deg)	θ_p (deg)	θ_{r2} (deg)		
5-1	5	0	NONE		Si	0.90
5-2	10	0			Si	0.95
5-3	20	0			Si	0.78
5-4	25	0			Si	0.75
5-5	30	0			Si	3.40
5-6	35	0			Si	3.71
5-7	10	0			Pt	0.82
5-8	10	0			Ni	0.50
5-9	10	0			SiO ₂	0.29
5-10	10	0			Cr	0.63

FIG. 9A

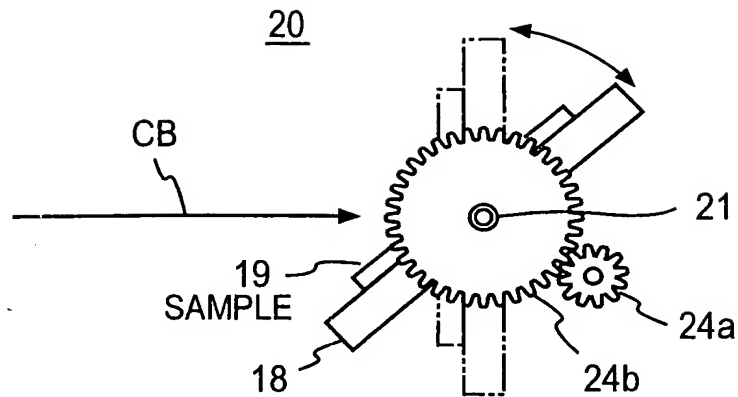
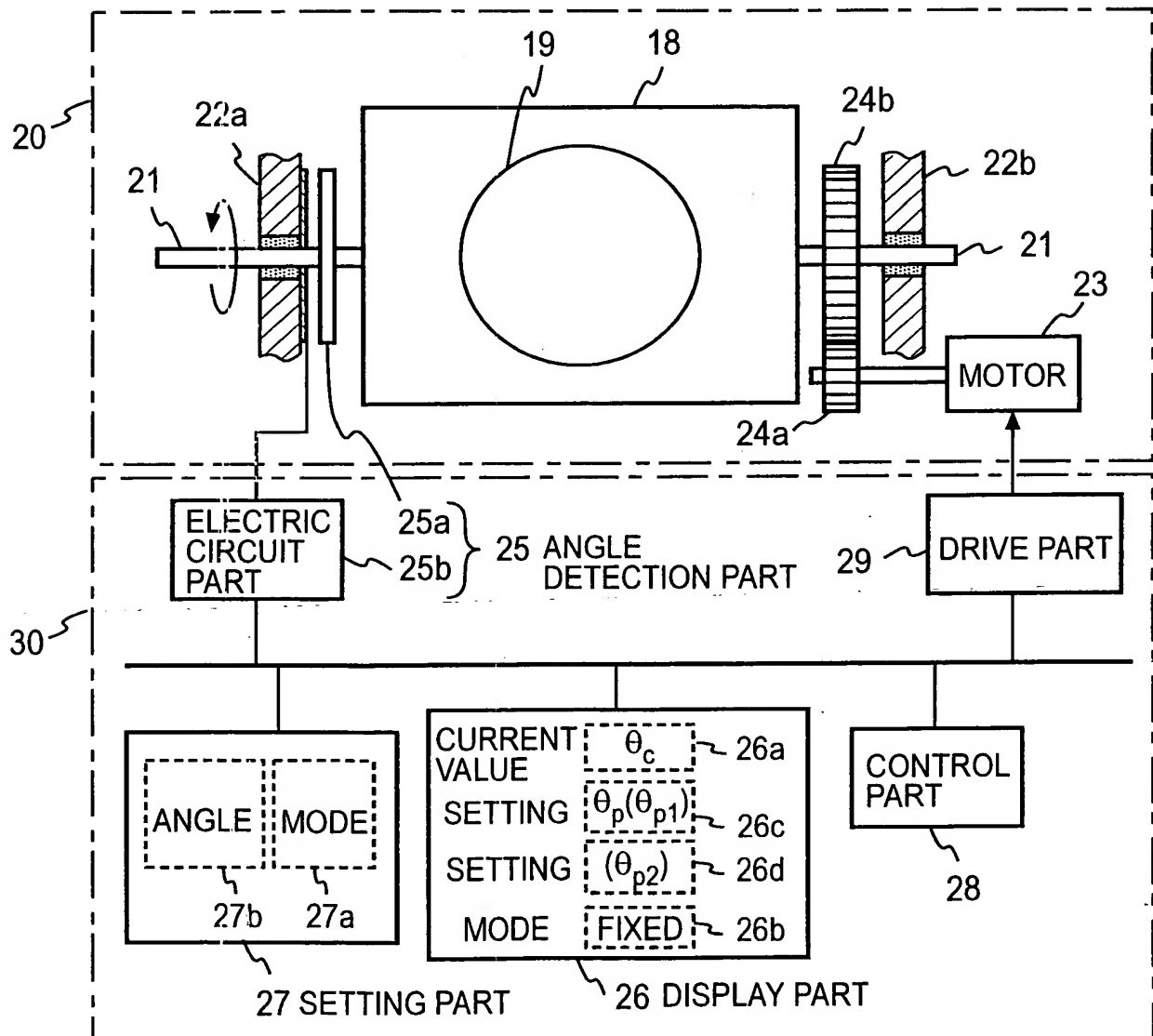
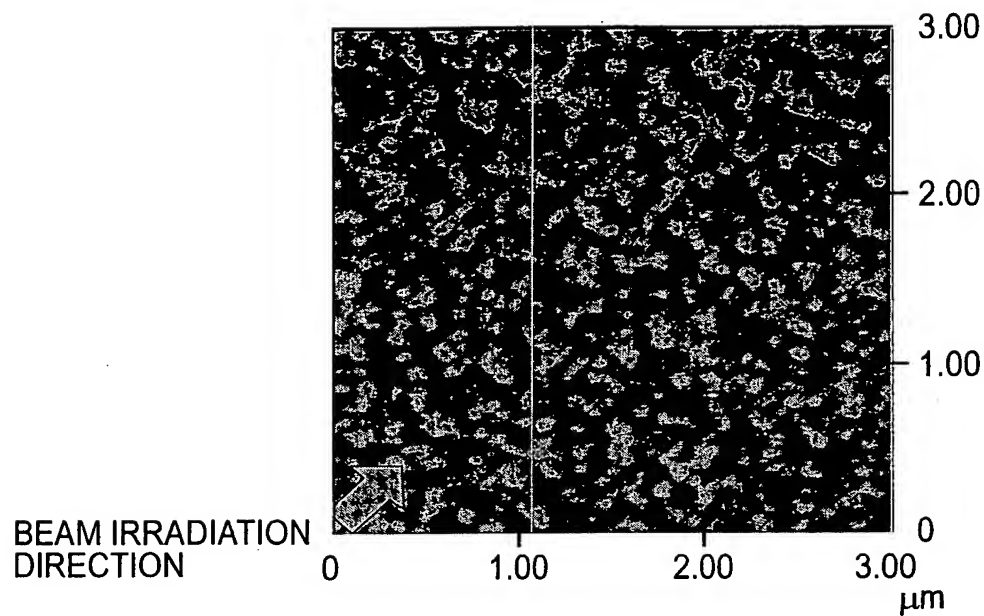


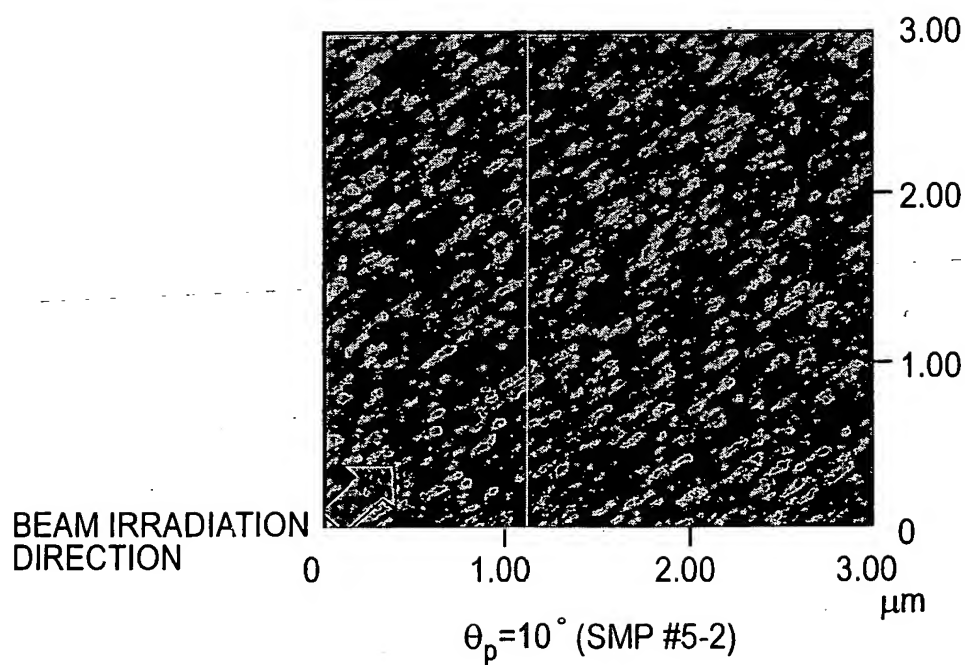
FIG. 9B





$\theta_p = 20^\circ$ (SMP #5-3)

FIG. 10A



$\theta_p = 10^\circ$ (SMP #5-2)

FIG. 10B

FIG. 11A

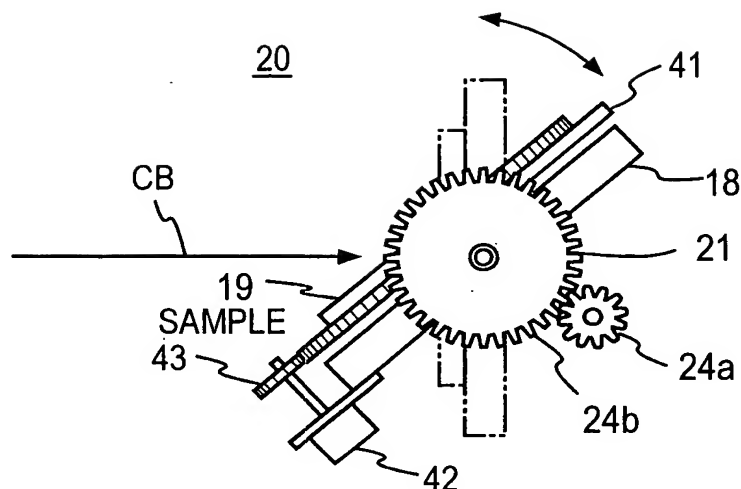


FIG. 11B

